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ABSTRACT

This study focuses on the prerequisites for successful communication and collaborative learning in a large multinational company experienced by human resource development (HRD) practitioners, who participated in a cross-cultural e-learning course. The participants were Finnish and Chinese employees, who used an asynchronous Web-based tool to study adult education in a virtual university course. The Web discussions of the one-year university course were used as material for this study. The discussions were anlaysed by the phenomenographic method. On the basis of the analysis three main themes concerning communication and collaboration at work could be identified: (1) prerequisites for collaborative activities; (2) cultural differences; and (3) the role of management. This paper discusses the implications of these aspects for the development of e-learning solutions for professional and organizational development. (Contains 14 references.) (Author)

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Communication and Collaborative Learning at Work: Views Expressed in a Cross-Cultural E-Learning Course

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Abstract: This study focuses on the prerequisites for successful communication and collaborative learning in a large multinational company experienced by human resource development (HRD) practitioners who participated in a cross-cultural e-learning course. The participants were Finnish and Chinese employees (n=17) who used an asynchronous web-based tool to study adult education in a virtual university course. The web discussions of the one-year university course were used as a material for this study. The discussions were analysed by the phenomenographic method. On the basis of the analysis three main themes concerning communication and collaboration at work could be identified: 1) prerequisites for collaborative activities, 2) cultural differences, and 3) the role of management. We discuss the implications of these aspects for the development of e-learning solutions for professional and organisational development.

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Introduction

Technological progress and changes in organisational infrastructures have increased the significance of collaborative learning for professional development. How knowledge is constructed, shared and communicated in organisations and how teams and organisations learn have become pivotal questions in organisational development (e.g. Argyris & Schön, 1996; Nonaka, 1994). The ability to learn collaboratively with others, both within and outside of their organisation, often means the difference between success and failure. Employees, who cannot network with others to share and build knowledge, will clearly fall behind those of their peers with such abilities.

This study is part of the larger project which aims to enhance cross-cultural collaborative learning through a university course in the workplace (Slotte & Tynjälä, 2002). As previous studies have showed effective use of computer supported collaborative learning in workplace depends on much more than simply purchasing a state-of-the-art package (e.g., Corrie, 2001). Organisational structures and practices as well as pedagogical arrangements and solutions together form a framework which much determines the success of any learning program. In the present study, we are interested in how experts in human resource development (HRD) view the prerequisites for successful communications in a large multinational company. As HRD practitioners work as key professional in organisational development (see, Slotte, Tynjälä & Hytönen, 2002), their views can provide important starting points for developing elearning programs to enhance professional and organisational development.

Communication and Collaborative Learning at Work

Collaborative learning is the process of generation of new knowledge and the capability that emerges when two or more individuals explore the target information together and produce shared outcomes (e.g. Dillenbourg, 1999; Roschelle & Teasley, 1995; Urdan & Weggen, 2000). Collaborative learning requires that the participants are open-minded, tolerant and make their thinking processes transparent. Sharing workplace experiences in a non-competitive spirit may benefit the individual and the organisation.

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Building knowledge together with others may lead at its best to the accomplishment of something more than could be achieved by the individual alone. Bryans et al. (1998) have stated that persons who adopt a collaborative mindset maintain an active awareness of the collaborative learning potential in every work-based transaction. Thus, making collaborative learning and career development available to people at work may offer direct benefits to employees, making learning an integral part of the enterprise.

Co-operation between universities and working life organisations has extended rapidly during the last few years (see, e.g. Bryans et al., 1998; Otala, 1998; Slotte & Tynjälä, 2002; Tynjälä, Välimaa & Sarja, 2002). Whilst university courses provide new tools for continuous professional development for fulltime employees, the completion of a long-lasting course can be a daunting task in itself. In addition to the familiar problem of finding time to study, the courses themselves may require employees to apply collaborative learning activities they are not familiar with. In particular virtual learning programs call for awareness and readiness on the part of participants to reflect their own way of learning and working. The virtual learning environment provides a freedom that, at the same time, involves taking responsibility for one's own learning process. This is difficult if the individuals rely on mere co-operation based on dividing the task in question into subtasks using a fixed division of labour and on transmitting existing knowledge from peer to peer. Although this kind of information-sharing in groups and teams is also helpful, it tends to maintain the status quo and signals acquiescence with the power hierarchy in order to avoid "rocking the boat" (Corrie, 2000).

Collaboration, instead, aims at producing a joint outcome and thus requires sharing and generating new knowledge with peers. In this way it provides better opportunities to individuals to use high-order thinking skills and problem-solving in the construction of their ideas about practice (Jonassen, 2000). Collaborative learning is based on a simple but powerful idea: to create groups or learning communities that ground their development on mutual learning processes. It requires that participants are positively interdependent to socially shared knowledge, e.g., the members of a group are selected so that they need each other in order to accomplish their joint task. This, in many cases, calls for acquiring new learning skills. The need to develop learning skills is of especial relevance for employees whose memories of formal education date back several years or even decades. The key notions here are being active and developing initiative.

Aim of the Study

In the present study, attention was not paid to how participants learn collaboratively but to how they describe the corporate communication and collaboration processes, i.e., what they think are the prerequisites and challenges for successful communication and collaborative learning in a large multinational company. In more detail, the following research question was addressed: How do HRD practitioners describe communication and collaborative learning in a large multinational company?

Study Design

Material for answering our research question was gathered from a web-based adult education course arranged for HRD practitioners working in a large multinational company. Altogether 17 participants (14 female and 3 male) from Finland and from China volunteered for the course. The course was given by the University of Jyväskylä, Finland. It consisted of all the content areas generally included in the degree program of adult education (15 credits) but was modified to support the HRD in a global company (see, Slotte & Tynjälä 2002).

A special emphasis in the course was in understanding the complicated relations between learning, communication and development in workplace. For this reason, many of the web-based discussions as part of the course were focussed on the questions of communicating and collaborating at work. We used these web discussions as a material for our study. At the end of the course this formed a database of 159 pages (Word document with single line spacing). In addition, three group interviews were carried out in China to complement the results.

All of the participants'comments were analysed qualitatively to obtain the major themes that characterise communication and collaborative activities in HRD practitioners' view. For this purpose, the principles of the phenomenographic analysis (Marton 1988) were applied.

Results

The analyses of the web-based conversations showed that HRD practitioners dealt with a great variety of different themes concerning communication and collaborative learning in workplace. In general, all participants emphasised the importance of collaboration at work and "the tremendous potential that lies within people". This was also explicated in some comments such as the following: "if we just study by ourselves and never test our thoughts with others, many good things will never come up".

As a result of the phenomenographic analysis, the themes discussed by HRD practitioners could be classified into three basic categories: (1) prerequisites for corporate collaborative activities, (2) cultural differences and (3) the role of management. In the following sections we will describe the contents of these categories in more detail. We will start with the first theme, within which, five different categories of description could be further identified.

Prerequisites for Corporate Collaborative Activities

Five categories of description for the prerequisites for corporate collaborative activities include:

(1) Individual responsibility
(2) Social skills
(3) Technical tools to support human interaction
(4) Atmosphere; open and constructive communication
(5) Adaptation to continuous change

The first category includes comments related to core of collaboration, that is building the knowledge together, emphasis being at individuals responsibility to add value to the communication process:

> Of course, we as part of the organizational network need to add value to the information and communication processes. It's not enough to store information somewhere in the Intranet or on various databases, if we do not filter and process them in a way that makes them valuable for those who need to retrieve this information. In the end, our organization is great in storing information. However, this information is usually hard to find and / or digest for those who need it.
>
> Besides, we are not only part of the network as such – we are also responsible to form, build and continuously re-build this network as to meet changing needs. Usually, elements are connected in a certain way. But in our environment, we need to make sure that the communication channels, the 'who-provides-what-to-whom' are always up-to-date.

In addition to the importance of collaboration, the course participants broadly discussed about the social skills and individual preferences of interaction taking place in connection with everyday work activities. These descriptions stressed the modest level of awareness and willingness to actively improve communication skills.

> The fact is that everyone is an expert in some area, the competence and knowledge each of us has, could help someone else if shared it with people. But the fact is that we often aren't aware of our own expertise until we start conversing with people, and through conversation find out what I could give to my colleagues and what I in return could get from them. This process of collaborative learning is in fact a joint effort to share and refine information, knowledge, opinions and ideas for mutual and organisational benefit. It is almost obvious that the prerequisite for this kind of collaborative knowledge creation

among colleagues and superiors will be based on trust, mutual respect, and open and supportive communication, which is a two-way dialogue.

In our organization that is technically very strong, the soft side of skills are often neglected or underestimated. It is not yet fully understood how important good relationships are for good organizational functioning and performance, and in the long run for the overall success of the company.

I strongly agree that in our organization we should use collaboration more and encourage people to share their ideas and experiences. However, most often people are accusing that there is no time to talk with each other's, or they don't think what could be the best way to do it.

When using collaboration as a method we should also remember that not everyone likes to discuss and share his or her ideas with each other's. Extraverted persons may be the noisiest ones and willing to share their thoughts as soon as possible. Introverts meanwhile need time to reflect and then maybe speak up.

Closely related to the topic of individual preferences comes the question of technical tools and the appropriate methods to support human interaction. Face-to-face communication was generally expressed to be the most rewarding method. Slightly more participants preferred face-to-face contacts to online communication although the benefits of technical tools around them were commonly acknowledged. Their usefulness was seen as "facilitating and making communication easier and faster" The following examples illustrate the opinions of the suitability of various communication tools:

We often forget interaction between people and just send emails and at the same time we loose something very human - joy of learning together. You Nina mentioned that we should create the environment where people are participating more and they should build together something new. Do you think that it is possible only via emails? I do not think so.

We needn't go to classrooms, separate courses or any other special place to learn, if we were able to see the learning opportunities around us every day.

What comes to interaction it shouldn't go through paper, neither through computer, but face to face communication. I think we still have space for improvement in this area. Quite often email or the Internet are very good ways for communication, but it is not very good if we are too much depend on them. Sometimes we are just sending an email, shooting the ball in the air and wait for someone to take it.

In a way this kind of online communication here in writing requires to interpret others in the way they have intended the meaning to be interpreted. In this kind of discussions, and in fact in all kind of communication, feedback is crucial, otherwise one wouldn't know how one's messages and thoughts have been understood and interpreted.

How people co-operate with each other's and create the common ground to share mutual understanding, beliefs and pre-suppositions is further challenged by continuous change. In these cases, the participants often mentioned that "change" is not really change unless it has been adopted by all the employees in the organization. Further, the participants mentioned constructive atmosphere and openness as being the most important issue to adapt to changing needs in global business. The following comments exemplify the descriptions of both categories:

The concept of perceptual change has been mentioned several times. But what may be difficult, is how to live with it, and adopt to all those novel situations and ways of working so rapidly and constantly. I think in the process of change, constructive, open and honest communication and sharing of thoughts and concerns may facilitate the adapting process and make it easier.

The everlasting change of things and organizations is a valid comment. It is not enough to learn to communicate to certain group of people. You have to learn to be able to

> communicate to target group that is always changing and might have different kinds of background, opinions etc.
>
> The nature of information we process and distribute is subject to continuous change. Only if the structure of the network and the speed fully support the business, will we be able to become a learning organization.

Cultural differences in corporate collaboration

Cross-cultural university course resulted in a large number of comments concerning the cultural differences in corporate communication and collaborative learning. The participants generally agreed that all collaborative actions are context-specific and they can be understood properly only by understanding the situation where they have been uttered. Therefore, "if a piece of communication is extracted from its original context, and expressed in another social context, it is most likely to be misunderstood and misinterpreted." These kinds of misunderstandings in human interaction were described to be rather common, especially when people from different cultural backgrounds were involved. This was partly because of "more often than not we tend to take comprehension for granted, without taking the other person's background, level of knowledge and experience into account".

> Communication is often claimed to be very ambiguous, maybe because meanings are not in words, but in people. People have different social and cultural backgrounds, education, worldviews, beliefs, norms, and attitudes against which they try and interpret other person's meanings, which again have been formulated against his/her own sociocultural background. It is a universal fact that these backgrounds seldom match. This is one of the facts that makes communication complex, and puts extra demands on the act of communication, and on how things should be said, and meanings negotiated.
> We should remember to take into account cultural differences. For example in China it is unheard of people to speak openly in front of their senior managers.

When the participants discussed about cultural differences they described it for the most part from the corporate communication point of view. In most cases, the descriptions derived from what people had been taught. These notions reflect the challenges for collaboration, which are primarily based on their previous experiences about who to talk with and how much it is appropriate to talk in certain situations:

> In the Chinese hierarchy environment, communication used to and sometimes still is perceived as top down, one-way approach. Even in the freer company context, not everyone is aware that they are supposed to respond; they are expected to explain their ideas assertively and are entitled to say no. We call it a "dead box", which means, after information goes into it, nothing is produced and it vanishes. With the discouragement, the information provider can become silent very easily, and eventually nobody takes the initiative to share.
>
> I see cultural differences here, because Finnish people are not taught to boast with something they know. And unfortunately it might sometimes be taken like that if you start telling about your experiences with an issue or telling another person how to do things. You just keep it to yourself and that's it.
>
> One point that Ann made is very important: the Chinese education and social systems do not encourage young people to criticize people of authority, i.e. parents, teachers, bosses, etc.
>
> Marianne, I also see the cultural difference HERE in China. Chinese are taught to play low on oneself on the one hand, which is recognized as modesty and on the other hand, knowledge and information are seen as power/advantage over others. There is a fear that if you "give" it to others, you don't have it any more. It sounds sad, isn't it? However, if we consider the huge population and notice the resources per capita, it gives no surprise. The scarcity of resources defines the Scarcity Mentality.

The role of management

Managers' way of confronting others openly and directly was described as the key for constructive communication culture:

> I think that managers are in a crucial position in creating and inspiring an encouraging communication culture through their teams.
>
> Where we have to become much stronger though is in changing the corporate culture. No training course can replace the motivation by the boss or other peers. We talk about intrinsic motivation as being crucial for the learning. But this also comes from the possibility to exchange and pair up with others. If the culture were an employee needs to teach others or at least summarize the most important learning points, if the boss really cared for the changes planned – then, a training course would be a big thing, a step into developing a learning organization.
>
> In the future I'd like to see the concept of collaborative learning in the form of conversation to spread also to the management level. Top management have a lot of valuable information to share, which would benefit the lower levels of management, and speed up the circulation of information and special know-how. They could act as guest speakers or facilitators in multiple occasions of learning, whether face-to-face or online. In fact, I think that this concept could be easily applied to our everyday lives if we only feel receptive for it, because in our immediate environment there is so much new to discover.

When the participants discussed about the managerial experiences, they usually criticized managers' willingness to improve their communication and other soft skills. This was seen as significant because "there are so much knowledge of effective collaborative learning that has not yet been applied into practice".

> I agree with you that practice isn't up to theory yet, and a lot needs to be done, especially in the area of management skills. Even if the management styles have changed for better direction, and 'regular' people get more and more responsibility, I still think that it is managers who with their own behavior and communication styles set the pattern for the whole team.
>
> People still tend to look for their superiors as role models. But as you said, very many managers don't seem to understand the benefit this would do to the performance and success of their teams, and that way to the whole company.
>
> It is strange that we talk about the improvement of communication and open, trusting atmosphere, but they still seem to stay on the level of words only. Often I think when participating in a course that deals with interpersonal, team building and communication skills, that more managers should participate, but they never do.

Discussion and conclusions

Three main themes emerged from the analysis of the HRD practitioner' e-learning discussions about collaboration and communication at work. First, the practitioners dealt with the general prerequisites for true collaboration and functional communication. Second, they raised the question of cultural differences that are present in the multinational workplace, and, third, they emphasised the role of management in creating the context and atmosphere for collaborative activities.

Given that the participants of the e-learning course were experienced practitioners in corporate human resource development activities, those three themes can be seen as a reflection of actual communication cultures of the company, and of the needs for developing possibilities for collaborative learning. Consequently, they can also be seen as a data which provides important hints for developing e-learning solutions to enhance communication and collaborative learning at multinational companies. In the

following passages we briefly suggest some aspects to be taken account while e-learning is applied for corporate training.

As prerequisites for corporate collaborative activities the participants mentioned not only technical tools but also individual and social characteristics such as individual responsibility, social skills, adaptation to continuous change and open communication atmosphere. These are factors that cannot be taken for granted in collaborative e-learning courses. For example, supporting atmosphere has to be constructed in mutual understanding between co-workers and co-participants. In an ideal case, a face-to-face meeting before starting e-communication could provide a context for building such an atmosphere. If face-to-face meeting is not possible, the informal introduction of people and negotiation of "the rules of the game" is important. Individual responsibility grows in an environment that positively emphasises mutual dependence.

Creating a learning environment that really supports communication and collaboration at work is not an easy job. It requires strong pedagogical insight, and eye for social situations and skills of guiding others. In this respect, the role of tutors of e-learning course is pivotal. Without skilful and experienced tutors e-learning situations may not reach the level on which significant learning experiences may take place.

In addition to creating a proper context for e-learning, taking account cultural differences between participants is important. This is a question that concerns not only multinational corporations but also other large companies. The ways of communication differ between countries and ethnical and social groups. How this can be taken into account in a way that respects all parties is a different question. Maybe becoming to know different cultural practices could be an important content and aim for multinational e-learning courses. We believe that current e-learning solutions provide excellent tools for increasing intercultural awareness and respect – given that the courses are run by teachers and tutors who themselves are familiar with different cultures and cultural practices.

The role of management in collaborative corporate learning and communication was the third main theme that was discussed by our subjects. The discussions reflected a concern about the distance between the ideal of organisational development and the actual managerial practices. We suggest that in corporate training programmes – conducted either in traditional forms of as e-learning solutions – the participation of the managerial level personnel would be of fundamental importance. If e-learning courses are designed for promoting professional and organisational development it requires the participation of the whole organisation.

In sum, for the development of successful e-leaning courses for professional and organisational development we emphasise the importance of the following four principles: 1) creating open communication atmosphere, 2) use of skilful and experienced tutors, 3) arranging cross-cultural training, and 4) involving the whole organisation, including management, in professional development programmes.

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